

<i>LineUp With Math™</i> Alignment Mathematics Content Standards, Benchmarks and Performance Standards June 2002	
Strand: ALGEBRA, FUNCTIONS, AND GRAPHS Standard: Students will understand algebraic concepts and applications.	
9-12 Benchmark: Use mathematical models to represent and understand quantitative relationships.	
Performance Standards: Grade 9-12 1. Model real-world phenomena using linear and quadratic equations and linear inequalities (e.g., apply algebraic techniques to solve rate problems, work problems, and percent mixture problems; solve problems that involve discounts, markups, commissions, and profit and compute simple and compound interest; apply quadratic equations to model throwing a baseball in the air).	<i>LineUp With Math™</i> Activities --Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios. --Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts. --Use percent relationships to resolve distance, rate, time conflicts in air traffic control.
9-12 Benchmark: Analyze changes in various contexts.	
Performance Standards: Grade 9-12 2. Solve routine two- and three-step problems relating to change using concepts such as: <ul style="list-style-type: none"> • exponents • factoring • ratio • proportion • average • percent 	<i>LineUp With Math™</i> Activities --Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control. --Use percent relationships to resolve distance, rate, time conflicts in air traffic control.
6. Evaluate the estimated rate of change in the context of the problem.	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios. --Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.